



THE Agricultural Situation

JANUARY 1952

Volume 36

Number 1

	Page
Biggest Production in History Asked of Nation's Farmers	2 Charles F. Brannan
Tax Changes Interest Farmers	5 Tyler F. Haygood
Some Facts About Farm Housing	7 Roy K. Burroughs
Outlook Highlights	9
Alternative Tractor Fuels	10 A. P. Brodell, P. E. Strickler
Zoning for Country Folk	12 E. D. Solberg

[The AGRICULTURAL SITUATION is sent free to crop and price reporters in connection with their reporting work]

A monthly publication of the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C. The printing of this publication has been approved by the Director of the Budget (February 4, 1949). Single copy 5 cents, subscription price 50 cents a year, foreign 70 cents, payable in cash or money order to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Biggest Production in History Asked of Nation's Farmers

More Feed is Major Objective in Goals

AMERICAN FARMERS are being asked in the 1952 Production Goals for the greatest achievement in their fine history. Feed grain production is stressed most heavily as a result of the increasingly tight feed grain supply situation and its threat to continued high level output of livestock, dairy, and poultry products.

The cotton goal is again placed at the high level of 16 million bales because of the importance of cotton to our economic and military strength, and to the rest of the free world. If the challenging goals for feed grains and cotton are reached, together with the goals for other major crops and the expected output of livestock, farmers will turn out a new record total production, nearly one-half greater than the prewar average.

The production goals are a practical attempt to shape production to meet first needs first. The goals program is also the framework within which this Department and all other cooperating agencies may aid the farmer in carrying out the job.

But it is the farmer who must do the production job. Except for experimental plots, the Department doesn't have an acre in production. And all our efforts must be geared to aid the farmer on the land . . . if our growing numbers of consumers and our Armed Forces and friends abroad are to have enough.

Farmer Must Have the Breaks

The goals program gives over-all direction and purpose to both the farmer's effort and the concerted drive to help him obtain needed information and materials for production. The handicaps the farmer will face in reduced manpower and tight supplies of certain raw materials will make his success dependent to a great extent upon the effectiveness of those supporting efforts.

With this assistance and with average weather, farmers will be able to fill the needs of consumers, the defense program, and essential exports. But a realistic look at the size of these first, basic needs, matched against our present productive capacity, makes it clear that we will not be able to add much to dwindling feed reserves. To rebuild our feed stocks would require much more fertilizer, or the planting of far more land than all our farmers have at their disposal.

We have about reached our cropland limits, and within that restriction it is imperative that we commit our land resources wisely—following the good conservation practices which assure sustained production.

Of necessity this year, the goals call for a cropland expansion of several million acres. Whether or not this essential expansion can be obtained—and without detriment to total land resources—depends upon individual farmers. With extra effort they may be able to press into cultivation 3 million or so acres of the reasonably good land which was idle in 1951. Moreover, they can divert to feed grain production some of the poor hay- and low-producing pasture lands that are so adapted. Because of the threat to land conservation, and the fact that acres in improved hay and pasture in many areas may be the best source of feed, such diversion should be made cautiously. The technical advice of conservation officials will contribute to the wisest land use in such cases.

For two successive years our livestock have been consuming more feed than we have produced. Greater feed production from both grains and forage must be achieved if we are to avoid forced reduction of livestock numbers.

To the farmer, the great need for corn, sorghums, and barley mean that, within his range of choice he should

give preference to these feed crops. The favored treatment for such crops should be extended to include the carrying out of all possible practices which contribute to higher yields. The goals for feed grains cannot be reached unless the farmer first plants the needed acreage and then follows up with the practices that bring higher yields.

To reach the national production goal of 3,375 million bushels of corn, yields 4 percent higher than average will be necessary on the suggested 89 million acres, about 5 million more than were planted to corn in 1951.

A sorghum goal of 205 million bushels has been set—29 percent above production for 1951. However, those farmers who can seed in excess of the goal are encouraged to do so.

The barley goal is 290 million bushels, 14 percent above 1951 production, and is expected on an acreage 19 percent above that of last year. Farmers in the Northern Plains States and the Pacific Coast areas where barley is the principal feed grain, are asked to give this feed crop high priority.

While oats are recognized as a good feed and nurse crop in some northern regions, farmers in the Corn Belt are asked to increase corn in its place wherever oats are not needed for legume and grass seeding. On the average, corn produces at least two times more feed than oats per acre in the Corn Belt.

Forage Crops Important

The building up of high producing hay and pasture stands is perhaps the best insurance against feed shortages for farmers with beef and dairy herds. It is a major aim of the goals and USDA-State College grassland programs to increase production from such land as much as facilities will permit in 1952. Considering the tight feed grain prospects, farmers in regions where drought and heavy snowfall are distinct hazards may wisely store hay wherever it can be produced above their current needs. A national tame hay goal approximately equal to 1951 acreage and production is being requested for 1952.

The great emphasis on feed will likely raise some questions as farmers

plan their production for 1952. The Midwestern farmer who intends to taper off his pork production, or who intends to increase his marketing of beef through herd culling, as suggested by the over-all goals planning, might logically ask: "Why should I increase feed grain production?"

The answer is that feed is needed in areas quite distant from where it is produced, particularly by poultrymen and dairymen who are dependent on such supplies. Also, the Nation needs urgently to rebuild its over-all feed reserves to safe levels. Because of bad weather in 1951, stocks at the end of the 1951-52 feeding year would be insufficient to tide us over a poor crop such as occurred in 1947 when shortages of feed forced liquidation of livestock. They wouldn't even pull us safely through another year like 1951-52.

Production of cotton at the goal level should fill domestic requirements, meet the export need, and still permit some slight improvement in reserves. But cotton carryover stocks last August 1 were the lowest in 25 years and represented only 2½ months of domestic mill consumption at current rates of activity.

The production of 16 million bales of cotton will require extra effort on the part of producers if this quantity is to be grown on 28 million acres. In the drive to step up yields, producers are urged to follow the timely suggestions of both conservation and extension specialists. The short supply of fertilizer must be stretched.

Oilseed production for 1952 has been set at a level which will fill needs for edible and industrial uses, including the military, while maintaining inventories at adequate levels.

For soybeans, a goal of 276 million bushels has been called for on a suggested 13 million acres, slightly less than the level of this year. Because of the strong requirements for feed grains, the goals have called for some reduction of soybean acres in the Corn Belt to allow for corn acreage expansion where it will count most.

The flaxseed goal of 38 million bushels, at average yields, will require the planting of 4 million acres, slightly fewer than were planted in 1951 when

34 million bushels were produced. Farmers are asked to hold flaxseed to this level because of the greater needs for feed production.

On the basis of the 1952 production goals, the prospective supply of food grains in 1952-53 is relatively favorable. The national wheat goal of 1,165 million bushels will not only permit the filling of estimated domestic and export requirements, but will also provide for a substantial increase in carry-out stocks.

A rice goal of 42 million 100-pound bags has been set and, at average yields, this production may be obtained from the planting of 1,950 thousand acres. A rye crop of 22.5 million bushels, produced on 1,828 acres, is believed to be adequate. This level is about the same as for the last 3 years.

The capacity to produce wheat, rice, and other food grains is well in excess of domestic requirements. Producers should be strongly encouraged to plant to feed grains all acres suitable to feed production in excess of the food grain goals.

The production goal for potatoes is 7 percent over 1951, and calls for 350 million bushels. The sweetpotato goal of about 46 million bushels is expected from the goal acreage and represents a large increase over the small 1951 crop.

Challenge to Teamwork

The value of the goals program to the individual farmer will of course be strongly dependent on how it is pointed up by the county and community agencies which serve him. In the broad sense, the goals show the farmer which crops are in greatest need, and the reasons behind that need. Further they furnish him with an overall view of the comparative demand for all crops. But it is in county or community that the national goals must be translated into advice most helpful to the individual farmer.

This year the price-support levels were announced with the goals to allow farmers to plan production with confidence. High level, properly balanced production is the best weapon against inflation; at the same time it is essential to provide farmers a price "floor,"

should large production from very favorable weather force prices to inequitable levels for some crops.

The 1952 support price levels announced for corn, upland cotton, rice, wool, milk, and butterfat, have been set at 90 percent of parity as of the beginning of the marketing year, the maximum permitted by the sliding scale under existing legislation. Mohair will be supported at 75 percent of parity, as of the beginning of the marketing year. Soybean support has been set at \$2.56 per bushel, 90 percent of the parity price as of December 1, 1951.

The support level for wheat has been announced at 90 percent of the parity price at the beginning of the marketing year, as of July 1, 1952, but not less than \$2.17 per bushel. Previously announced support levels for other grains are oats 78 cents per bushel, barley \$1.22 per bushel, rye \$1.42 per bushel, grain sorghums \$2.38 per hundred-weight, and flaxseed \$3.77 per bushel. These prices are equivalent to 80 percent of parity as of September 15, 1951. Minimum dollars-and-cents levels for each commodity, where not set already, will be announced well before planting time.

The goals for 1952 present a challenge not only to farmers but to all those who serve farmers—business people as well as those in Federal and State agencies. In addition to knowledge of the goals and price supports, the job requires the best scientific information, adequate credit, electricity, machinery and repair parts, fertilizers, insecticides, seeds, and many other production materials. The manpower problem must not be allowed to get out of hand. Special attention should be devoted to the problems of those farmers who are underemployed or for any other reason are less efficient producers than they could be.

There are many points at which the job could bog down, but by working together we can all contribute toward another great record by American agriculture in support of our common aims: Defense against aggression and the preservation of world peace.

Charles F. Brannan
Secretary of Agriculture

Income Tax Changes Of Interest To Farmers

FARMERS CAN EXPECT to pay higher rates of Federal income taxes this year. But they also may enjoy some special benefits from changes made in the 1951 Revenue Act.

Rates for the lowest bracket of taxable income (up to \$2,000) have been increased 11 percent above those payable under the 1950 law, and for other brackets of income about 11¾ percent. The increase became effective on November 1, 1951, and is due to be eliminated in 1954. A special schedule of tax rates has been devised for the calendar year 1951, and another for later years. The exact tax due in any year should be fairly easy to figure, however, because each rate schedule combines into one the normal tax, the surtax, and the increase that applies to total income of that year.

Advantages for Dependents and Heads of Families

A dependent now can have gross income up to \$600 instead of \$500 and still be claimed as a dependent. Any amount earned by a dependent up to \$600 need not be included as income on the taxpayer's return. This should benefit farmers who have children who work part-time during the year.

The new law gives the head of a household about one-half of the benefit now given a married couple who uses the split-income provisions of the Federal income tax. A separate schedule of rates for this group should make it easier for the taxpayer to figure the exact tax due. The unmarried head of a household is a taxpayer who maintains a home for himself and a son or daughter, or other relative who is a dependent. He must supply more than one-half of the cost of maintaining the home, among other requirements. These new advantages for unmarried heads of households do not apply to the present tax year but will be in effect for 1952 incomes.

Medical Bills Deductible at 65; Sale of Home, New Advantages

Where a taxpayer or his wife has reached the age of 65, all medical expenses of either spouse are deductible under the new law. Previously only that part of such expenses as exceed 5 percent of gross income could be deducted by the taxpayer. This rule continues to apply for people under 65.

The 1951 Revenue Act makes it possible for a home owner to exchange his principal residence for another of equal value without paying an income tax on any profit realized from the transaction. For the farmer, the new provisions apply only to sales of the residence and service buildings pertaining to it. They do not apply to the farm land or buildings used in the farm business. Under certain circumstances the farm house may be exchanged for a house in town.

No Tax On "Even Swap"

Previously, any profits made from the sale or exchange of one's residence were subject to capital gains treatment. That is, the regular tax rates (up to a maximum of 50 percent) were applied to one-half of the amount of gain. The profit usually was the difference between the sale price of the residence and its cost or value when acquired plus any added improvements. Under the old provisions, an "even exchange" of houses might have resulted in a large income tax payment by each party to the trade.

Under the new law, where a taxpayer sells his principal residence and purchases another of equal value within 1 year before or after the date of sale, any gain realized need not be reported. If a new residence is being built for the taxpayer, he is given a period of 18 months during which he may move in and still obtain the benefits of the law. If the taxpayer receives more for his house than he paid for the new one and

part of the sales price represents a profit he must pay an income tax on the profit part of the difference. Benefits of this provision are retroactive to January 1, 1951.

Family Partnerships

The 1951 Revenue Act makes it easier for a farmer to prove the existence of a father-son partnership. For tax years beginning after 1950, a farmer's son may become a partner for Federal income tax purposes if he owns a capital interest in the partnership. The amount of capital owned must be a material income-producing factor, but the interest held may be obtained by gift or purchase. The purchaser or donee then becomes liable for his share of the income tax arising in the partnership.

The motive behind the transfer of the capital interest is no longer important. Nor does it matter whether the business benefits from a new partner. The Commissioner of Internal Revenue will inquire only as to the actual ownership of the interest. Whether or not vital services are performed, or an intrafamily gift is motivated by thoughts of business benefits, is not important. The question is whether the creation of the partnership was in good faith.

The farmer's partner-son may enter military service without losing the benefits of the relationship. Family members who may become partners include the taxpayer's spouse, ancestors, or lineal descendants.

Changes for Certain Livestock

The Revenue Act of 1951 makes it possible for many farmers to sell more of their livestock as "capital assets" rather than as "commodities to customers" and thus pay a much lower tax on the profits made. A low-income farmer may pay as little as 11 percent of the profits on such sales, and the highest percentage now in the law is 26. Ordinary tax rates, of course,

range from about 20 to more than 90 percent.

The 1951 Act provides this special treatment for sales of "livestock—regardless of their age—held by the taxpayer for draft, breeding, or dairy purposes, and held by him for 12 months or more from the date of acquisition. Such term does not include poultry." Important differences compared with previous requirements are that (1) the holding period is changed from 6 to 12 months, and (2) the problem of determining the age of eligible animals is eliminated.

Taxes On Cooperatives

Farmers' cooperatives become subject to the Federal corporate income tax (but not the excess profits tax) for tax years beginning after 1951. In computing net income for tax purposes, these organizations may deduct capital stock dividends and any other amounts allocated to patrons whether paid in cash or merchandise. Thus the cooperative does not have to include patronage dividends as gross income if its bylaws permit payments of such dividends and if the liability has been created by the directors.

Sale of Growing Crops

Until the 1951 Revenue Act became law, the sale of orchards and groves with valuable fruit on the trees had to be allocated between the fruit (to be sold to customers) and land and trees (assets used in the farm business). The part allocated to the fruit was fully taxable at regular rates, whereas the other part was subject to capital gains treatment. Under the new provisions, sales of unharvested crops when made with sales of land are considered as being used in the farm business and now receive the favored treatment accorded capital gains.

Tyler F. Haygood
Bureau of Agricultural Economics

Gleaning Some Facts About Farm Housing

FARMERS SPENT almost 2.5 billion dollars on farm construction in 1950, compared with 2 billion in 1949. Apparently construction has continued at high levels in 1951. These totals cover the dollar outlays for building, remodeling, and repairing farmhouses, farm service buildings, fences, pumps, wells, and windmills on the 5.4 million farms reported by the Census in 1950.

Since farmers are expected to produce increasing amounts of food and fiber, the efficiency, value, and maintenance needs of their farm buildings and houses must be considered in connection with the defense program. Such items as the inventory, condition, rate of change, and needed repairs of farmhouses and other buildings are

important in determining farmers' needs for construction materials in the defense effort.

The proportion of the expenditures that are being used for the different types of construction work on *houses* and *service buildings* may be determined from results of a survey made in 1950 by the *Bureau of Agricultural Economics* which obtained construction data for 1949. (See table I below.) The survey reflects conditions on an estimated 4,750,000 farms of 3 or more acres, with agricultural production valued at \$150 or more in 1949 or 1950, and having resident operators. The survey covered only buildings and not such items as fences and wells.

I. Farm construction: Estimated number of buildings and cash expenditures for farmhouses and service buildings, by type of construction, 1949 ¹

Type of construction	Farms reporting	Number of buildings	Cash expenditures			
			Contract work	Materials	Labor	Total
Farmhouses						
	<i>Thousands</i>	<i>Thousands</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>
New construction.....	81	83	57	169	68	294
Major improvements.....	796	807	136	234	72	442
Repairs.....	2,069	2,146				199
Total.....						935
Service buildings						
New construction.....	678	840		368	91	459
Major improvements.....	286	323		77	22	99
Repairs.....	803	1,187		99	33	132
Total.....				544	146	690
Grand total.....						1,625

¹ See USDA 1595-51-2 of June 29, 1951.

Below is the way the 877,000 new farm service buildings and the cash expenditures for them were divided. Percentages are shown by type of structure. The first column of figures shows the percentage of the buildings; the second column, the percentage of expenditures for the various types of buildings:

	Per- cent	Per- cent
General purpose barns.....	12	20
Poultry houses.....	23	15
Hog houses.....	6	3
Other livestock buildings.....	11	14
Granaries.....	4	5
Corn cribs.....	9	10
Other storage buildings.....	7	8
Machine and implement sheds, shops, and garages.....	18	21
Other buildings.....	10	4
	100	100

Fewer Houses at Year's End

A high proportion of the new farmhouses were built in the South. Major improvements and repairs were well distributed over the country, but larger expenditures were made in the North than in the South. Construction work on farm service buildings was much more concentrated in the North than in the South.

Whereas 83,000 farmhouses were built in 1949 on the farms represented by the survey, another 15,000 were added from houses moved onto farms

and from other buildings that were converted to dwelling use. However, in the same year on the 4,750,000 farms represented by the survey, there were 29,000 houses that were lost by fire, windstorm, and other causes. Moreover, 47,000 houses were torn down and 26,000 houses were converted to other uses or moved off farms. Thus during the year there was a net loss of 4,000 dwellings. This is understandable at a time when farm population was dwindling.

The houses covered by the 1950 survey were classified with respect to structural level and condition as "low," "intermediate," and "high." By "structural level" is meant the basic durability, weather-tightness, and quality of workmanship of the original construction. By "condition" is meant the degree of deterioration of the structure as it stands. These classifications were made on the basis of fairly objective and detailed descriptive data prepared by the field enumerators who described what they saw by checking multiple choice descriptions of each part of a house as seen from the outside. The percentage distribution of the farmhouses in the United States and its regions on the kind of farms covered by the survey by the rating of structural level and condition in 1950 is shown in table II below:

II. Distribution and rating on structural level of farmhouses in the United States in 1950*

Region	Rating		
	High	Intermedi- ate	Low
	Percent	Percent	Percent
United States.....	39	25	36
Northeast.....	59	27	14
East North Central.....	60	21	19
West North Central.....	47	24	29
South Atlantic.....	31	25	44
East South Central.....	23	21	56
West South Central.....	22	33	45
West.....	47	27	26

*By regions, on the kind of farms covered by the survey.

Outlook Highlights

. . . JANUARY 1952

High level economic activity and record consumer incomes are supporting a strong demand for farm products.

Prices received by farmers at mid-December averaged 1 percent higher than a month earlier. Crop prices in general were higher, reflecting seasonal price gains and reduced crop prospects, particularly cotton and corn. Live-stock and livestock product prices averaged lower, as greater-than-seasonal increases in dairy products failed to offset a seasonal decline in meat animal and egg prices.

It is instructive to note which deficiencies cause houses to be classified as "low." Such information is available for houses on farms that produced \$1,950 or more income in 1949.

Of the houses rated "low," 58 percent in the Northern States, lacked weather-tightness, 52 percent in the South; and in the North, 2 percent had less than 200 square feet of floor space compared with 1 percent in the South.

In the North, 7 percent of the houses rated low had no foundation, compared with 3 percent without foundation in the South; in the North, 15 percent had wooden posts or piers without mortar or without curtains, and in the South 35 percent had piers without mortar; in the North, 19 percent required major repairs to the foundation compared with 25 percent in the South.

Of the low-rate houses, 1 percent in both the North and the South had tar paper exterior walls. In the North 9 percent, and in the South 21 percent had major faults in the walls.

Low-rate houses having a serious sag in roof-pole, or area amounted to 4 percent in the North and 8 percent in the South; and major faults in chimneys ran as high as 17 percent in the North and 25 percent in the South.

Roy K. Burroughs
Bureau of Agricultural Economics

Business Continues On Even Keel

The Nation's economy has continued generally stable, despite shifts in certain activities. Increased output of defense goods has been offset by reduced output for nondefense uses, resulting in little change in total industrial activity over the past few months.

Business showed signs of a moderate upturn. Retail sales continue high and sales by manufacturers were up a little more than seasonally. Business concerns are expected to increase their expenditures early this year.

Moderate consumer buying is probably contributing to the relatively low output of some consumer durables while materials allocations will further restrict automobile production.

Total Employment Steady

Civilian employment in November totaled 61.3 million persons, same as a

(Continued on page 14)

Smaller Pig Crop Now Indicated

HOG PRODUCTION is turning down after increasing for 5 successive years. According to the December pig crop report, farmers' intentions were to have 8 percent fewer sows farrow next spring (December 1 to June 1) than in the spring of 1951. If this intention materializes and the number of pigs saved is average, as adjusted for trend, the 1952 spring pig crop would be about 56.5 million head. A spring crop this size would be 9 percent smaller than the big 1951 spring crop but 2 percent larger than the 1940-49 average.

According to the report, 40.2 million pigs were saved in the 1951 fall season (June 1 to December 1). This fall crop, only 2 percent larger than a year earlier, combines with the 1951 spring pig crop of 61.9 million to produce a total 1951 pig crop of 102.1 million head. Such a crop is the third largest on record, an increase of 5 percent from 1950, and nearly one-fourth more pigs than were saved 5 years earlier.

Alternative Fuels

FOR FARM TRACTORS

THIRTY YEARS AGO farmers were little concerned with the source of energy with which to power their field machines. They worked their crops largely with horses and mules and relied on their own fields and pastures for feed. Now that tractors to a large extent have replaced animal power, farmers are heavy purchasers of motor fuels. They are dependent on someone else for steady supplies of the necessary fuels to power their machines.

This means it is to the farmer's interest to keep himself informed about the changes in fuels used and the availability of such fuels.

Tractor Fuel a "Must"

Farmers of 1952 will have around 4 million tractors, not counting the garden type. This is about 16 times as many as were on farms in 1920. Work animals in 1952 will total around 5,500,000 head, about one-fourth of the 1920 number. The area in harvested cropland of 1952 will probably be about the same as in 1920. So the number of work animals could supply power for only about 25 percent of the cropland. Actually they will supply less than that, because many of the work animals left on farms are no longer used full time.

With the increase in mechanization the farmer has become largely dependent on petroleum products as fuel for his power machines. Today's farmer is directly concerned with the output of oil and gas wells, with refineries, and with transportation facilities such as railroads, pipelines and motor trucks.

Farm tractors alone used about 4 billion gallons of various petroleum fuels in 1951. This is 16 times as much motor fuel as was used by farm tractors in 1920.

The modern tractor is used more hours per year than its predecessor, because each year finds more machines

and more attachments adapted for use with tractor power.

Changes in Tractor Fuel

Extensive changes have taken place during the past 30 years in the kind of fuel used by tractors. The tractors of 1920 had low compression motors and many were designed to utilize low-octane fuels such as kerosene. Then gasoline accounted for only 40 percent of the tractor fuel. Nationwide studies show that about 70 percent of the tractor fuel of 1940 was gasoline. By 1947 the proportion had grown to 80 percent. This trend toward the increased use of gasoline has taken place even though the Diesel tractor appeared on farms after 1920. A considerable number of crawlers and some of the large size wheel tractors now have Diesel motors. By 1947, however, only 4 percent of the fuel of farm tractors was Diesel fuel.

There are important reasons why farmers have increased their use of gasoline as a tractor fuel. With gasoline, there is less oil dilution, it is cleaner burning than the heavier fuels and even more important it is easier to start the motor with gasoline than with low-octane fuels, especially in cold weather. This is especially important nowadays when many farmers use their tractors throughout the year. Less oil dilution means fewer oil changes, and cleaner burning motor fuels mean less frequent servicing of the motor. These save money and thus many farmers believe that the advantages of using higher-octane fuels more than compensate for their extra cost.

LP-Gas as a Tractor Fuel

Developments of recent years indicate that the trend toward higher-octane tractor fuels may be accelerated in the years ahead. Ordinary gasoline has an octane rating of around 72, but LP-gases have substantially higher octane ratings. For butane the octane

rating is about 93, and it is more than 100 for propane. These products are designated as liquefied petroleum gases because at normal temperatures and pressures they are in a gaseous state. These fuels must be transported and stored under pressure.

At atmospheric pressure, butane is a gas at temperatures of 32° F. and above, and propane at 44° below zero and above. Propane is more used than butane in the North, as butane would not vaporize at normal winter temperatures in these colder areas.

Bulk Deliveries Spreading

The LP-gases consist largely of propane and butane and propane-butane mixtures. Their use on farms is becoming widespread. More than one-fifth of the farms of the Nation used these gases in one or more ways in 1949, according to a Nation-wide study.

In many areas the LP-gases are sold in bulk, i. e., by the gallon. In other areas, they are sold by the pound. Here they are usually known as bottle gas or cylinder gas. In the bulk areas farmers usually buy the LP-gases as butane or propane.

In many bulk areas, the cost per gallon of LP-gas is often below the cost of gasoline. On the other hand, the cost of LP-gas in areas where it has to be purchased by the pound is now much higher than gasoline. But bulk deliveries are spreading and may soon cover most of the country.

LP-gases have been used as a tractor fuel for 15 or more years. It has been only recently, however, that there have been developments which indicate that they may become important tractor fuels. Manufacturers now produce conversion units which can be adapted to tractors designed for using gasoline and other fuels. Also several of the larger manufacturers of farm tractors now offer for sale tractors that are especially designed for using the LP-gases.

The cost of the conversion unit varies widely, ranging from about \$100 to about \$300 each, depending on the type of unit. The low-price unit involves largely a change in the storage tank, new connections, and changes in the carburation system. With the more

expensive types the compression ratio of the motor is increased, a cold manifold installed, and cold spark plugs replace the regular spark plugs. These are in addition to the changes for the low-price unit.

The compression ratio can be changed either by installing a new cylinder head or with high-altitude pistons. Increasing the compression ratio of the motor increases its power and the extra power may be more than the component parts of the tractor can withstand. Before changing the compression ratio the approval of the manufacturer of the tractor should be obtained.

Trade sources indicate that there are now about 100,000 of these "changed-over" tractors on farms. Most of the conversion units were bought in the last 2 years.

With converted tractors, consumption of LP-gas for the same work may average around 20 percent above the quantity that would be required with gasoline or lower-octane fuel. Thus to be attractive LP-gas should be somewhat below the cost of gasoline in order to pay for the conversion cost and to defray extra costs that might be required for storage tanks. Areas close to the source of supply are most likely to have a price advantage over competing fuels.

There are several important advantages in using LP-gas as a tractor fuel. It is the cleanest burning tractor fuel thus far available. There is less motor wear and the period between overhauls is lengthened. Oil dilution is substantially less than with gasoline and oil changes can be less frequent.

Another important advantage is that the LP-gases, especially propane, are expected to be in relatively large supply in the years ahead. Considerable quantities of propane are not now utilized and large market supplies are available. Should a critical situation develop gasoline might well be in short supply. Then an increased use of the LP-gas as a fuel for tractors for stationary and mounted motors and for other uses could be highly desirable.

Albert P. Brodell
Paul E. Strickler

Bureau of Agricultural Economics

Country Folk Need Zoning, Too

... Avoid Haphazard Community Growth

TODAY, NEW AREAS of land-use maladjustment are appearing in many rural communities. Good roads and the automobile have extended commuter zones in some cases 30 to 50 miles beyond city limits. The urban populace has spread over the countryside. The impact in many farm communities has been devastating. Problems stemming from change on this enlarged urban fringe pose a new challenge for rural zoning.

RURAL ZONING is truly at the crossroads. It can continue plodding along beaten paths, or its horizon of service to the rural community can be expanded across new frontiers. The decision is largely one for rural people, acting through their local governments.

Only two decades ago, rural people in the cut-over region of Wisconsin, Michigan, and Minnesota, pioneered in rural zoning. They used the zoning powers vested in their counties to help prod lands that were not suitable for farming, and often idle, into profitable forestry and recreational uses. In these northern cut-over countries, the usual transition from forestry to agriculture failed to occur at the rate anticipated. Soils were of poor quality for farming. Many isolated farms, however, had been started during an abortive colonization era, and scattered settlement necessitated high taxes to provide even minimum public services.

Remedies Found

The remedy soon became obvious. A major readjustment in the pattern of land use was needed. Forest land had to be separated from farm land. To accomplish this end, both persuasion and restraint were used. County zoning ordinances were adopted that set aside in restricted forestry and recreational districts large areas of land that were submarginal for farming. Within such zoning districts only forestry, recreation, and certain related uses were permitted. All other uses were prohibited, including the establishment of new farms.

Under another phase of the remedial program, isolated settlers living in the restricted zones were helped to relocate. These settlers, who legally could remain, were bought out or their lands were exchanged for better land in established farm communities. Following such relocation, roads and schools that were no longer needed were closed. The savings incurred permitted a reduction in the taxes on cut-over lands.

Zoning Laws in 38 States

Rural zoning, however, has not been confined to the three Lake States named. The legislatures of 38 States have passed rural zoning enabling laws. These laws authorize the counties, towns or townships, or other local units of government in the respective States, to adopt local zoning ordinances. In some of the States, the authorization applies only to certain designated counties or local areas.

A total of 173 counties in 23 States have taken advantage of the powers granted by their legislatures and have passed zoning ordinances. Thirty-seven of these counties are in Wisconsin and 26 in California. In each of 4 States, Illinois, Indiana, Nebraska, and Virginia, 10 or more counties have zoned; and in 7 other States, at least 5 counties in each have enacted zoning ordinances. In addition, numerous towns and townships have zoned.

Nor has rural zoning been limited to the objectives and types of districts established by counties in the cut-over region. Many other community objectives have been attained by zoning. Zoning has been used by rural govern-

ments to protect valuable agricultural areas from the encroachment of unwanted and objectionable commercial and industrial activities, and even from premature subdivision for residential uses. In turn, separate zones have been set aside for residential, commercial, and industrial land uses.

Offensive Activities Avoided

General agricultural zoning districts were established by 50 percent of the county zoning ordinances examined by the writer. Zoning regulations in such districts do not interfere with the use of land and buildings for most farming purposes. In fact, enabling statutes in 17 States exempt agriculture from zoning regulations. Nonagricultural land uses in farm zoning districts, however, are frequently restricted for the benefit of the rural community.

Today's changing, growing rural communities need not tolerate a condition of haphazard growth. Rural people need not sit idly by and see offensive and distracting activities and even urban slums transferred from the city and scattered over the countryside. You can protect yourselves by zoning. In zoning, you have a flexible tool for affirmatively guiding community growth.

Tax Savings and Other Desirable Ends

Commerce and industry can be directed to zoning districts created for such purposes with advantage to all concerned. At the same time, good agricultural land can be enclosed in farm zoning districts and protected. New residential developments can be guided to advantageous zones. Furthermore, the desirability of residential districts can be enhanced by zoning regulations which impose uniform set-back of all buildings from roads, limit the height of buildings, and, to prevent overcrowding, specify the minimum size of lot permitted and the number of families allowed per housing unit. For sanitary reasons, larger minimum

lots may be required where septic tanks are used.

Also, by passing zoning regulations that require large minimum size tracts, that is, upward of 5 acres per tract, the rural community can prevent, or at least retard, the premature breaking up and sale of good farm land for non-farm residential uses. Unnecessarily early parcellation of land which is not reasonably needed for urban growth often results in higher taxes in the rural community and in the shifting of development costs to neighboring farm land. In the 1930's rural zoning was used in the Lake States to reduce taxes on cut-over lands. Perhaps rural zoning can also be used to prevent tax increases in farm zoning districts on the urban fringe.

Roadside Zoning

The rural community, too, might do something about our hazardous roads. Slaughter on the highways is approaching the one million mark. Remedial tools are in the community's hands. Adequate roadside zoning can materially enhance both the safety of the highways and their traffic-carrying capacities. Needed zoning regulations might include minimum set-back of buildings from all roads, access controls, and restrictions on outdoor advertising and on the creation of ribbon business areas.

Head Off Future Trouble

Today on the urban fringe and in the rural community generally the pressure of change is felt at every crossroad. Change often brings new problems. In many areas, the land-use headaches of tomorrow are now in formation. Emerging maladjustment caused by haphazard growth calls for affirmative guidance by the community. This direction the community can provide by zoning. And we must remember that major decisions in alert communities are not made by inaction.

Erling D. Solberg
Bureau of Agricultural Economics

Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. A average of reports covering the United States weighted according to relative importance of district and State]

Commodity	5-year average		Dec. 15, 1950	Nov. 15, 1951	Dec. 15, 1951	Effective parity price Dec. 15, 1951 ¹	
	Base period price 1910-14 ¹	January 1935- December 1939					
Basic commodities:							
Cotton (pound).....	cents.	\$ 12.4	10.34	40.36	41.00	40.34	34.10
Wheat (bushel).....	dollars.	1.884	.837	2.03	2.19	2.22	2.43
Rice (cwt.).....	do.	1.97	1.65	5.32	4.88	4.93	5.59
Corn (bushel).....	do.	1.642	.691	1.45	1.62	1.69	1.77
Peanuts (pound).....	cents.	4.8	3.55	10.9	10.1	10.4	13.2
Designated nonbasic commodities:							
Potatoes (bushel).....	dollars	1.12	.717	.889	1.74	1.93	1.83
Butterfat in cream (pound).....	cents.	27.2	29.1	64.8	71.7	75.7	77.2
Milk, wholesale (100 lb.) ²	dollars	1.70	1.81	4.54	5.15	5.22	4.83
Wool (pound).....	cents.	20.1	23.8	82.8	65.7	62.7	57.1
Other nonbasic commodities:							
Barley (bushel).....	dollars.	1.619	.533	1.19	1.34	1.38	1.53
Cottonseed (ton).....	do.	26.10	27.82	102.00	72.70	71.50	74.10
Flaxseed (bushel).....	do.	1.67	1.69	3.59	4.10	4.24	4.74
Oats (bushel).....	do.	1.399	.340	.849	.911	.949	1.900
Rye (bushel).....	do.	1.720	.554	1.37	1.62	1.73	1.78
Sorghum, grain (100 lb.).....	do.	1.21	1.17	1.88	2.39	2.51	3.00
Soybeans (bushel).....	do.	1.00	.954	2.70	2.77	2.83	2.84
Sweetpotatoes (bushel).....	do.	.908	.807	1.73	2.80	3.05	2.58
Beef cattle (100 lb.).....	do.	7.02	6.56	25.20	28.10	27.50	19.90
Chickens (pound).....	cents.	11.1	14.9	22.3	23.2	23.4	31.5
Eggs (dozen).....	do.	21.5	21.7	57.7	56.5	51.1	53.2
Hogs (100 lb.).....	dollars	7.57	8.38	17.80	18.00	17.60	21.50
Lambs (100 lb.).....	do.	7.71	7.79	27.60	29.00	28.50	21.90
Veal calves (100 lb.).....	do.	7.84	7.80	28.40	31.60	31.30	22.30
Oranges, on tree (box).....	do.	2.29	1.11	1.71	1.01	1.27	3.73
Apples (bushel).....	do.	1.02	.90	2.12	2.06	2.16	2.90
Hay, baled (ton).....	do.	11.87	11.20	21.80	23.10	24.40	29.30

¹ Adjusted base period prices 1910-14, based on 120-month average January 1941-December 1950 unless otherwise noted.

² Parity prices are computed under the provisions of title III, subtitle A, section 301 (a) of the Agricultural Adjustment Act of 1938 as amended by the Agricultural Acts of 1948 and 1949.

³ 60-month average, August 1909-July 1914.

⁴ 10-season average 1919-28.

⁵ Transitional parity, 90 percent of parity price computed under formula in use prior to Jan. 1, 1950.

⁶ Prices received by farmers are estimates for the month.

⁷ Preliminary.

Outlook Highlights

(Continued from page 9)

year earlier. Only 2.9 percent of the civilian labor force is now without jobs. A year ago 3.5 percent were unemployed. Farm employment continues to decline.

Higher Incomes and Retail Sales

Personal incomes in the Nation rose 4 billion dollars from September to October to an annual rate of 257.5 billion dollars. Retail sales were up about 6 percent in November compared with a year earlier.

Last Year's Farm Receipts

Farmers' cash receipts from marketings totaled 29.8 billion dollars for the first 11 months of 1951. This topped the same period a year earlier by 15 percent. Total cash receipts for the year are expected to be close to 32.8 billion dollars. For the 11-month period, receipts from livestock were up 23 percent for a year earlier; crops 3 percent.

Beef Supplies Catching Up

Total meat production this spring is expected to be considerably above the small production of last spring. Pork output will be up less from a year ear-

(Continued on page 16)

Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39=100) ¹	Total income of industrial workers (1935-39=100) ²	Average earnings of factory workers per worker (1910-14=100)	Whole-sale prices of all commodities (1910-14=100) ³	Index numbers of prices paid by farmers (1910-14=100)			Index numbers of prices received by farmers (1910-14=100)			
					Com-modities	Wage rates for hired farm labor ⁴	Com-modities, interest, taxes, and wage rates	Livestock and products			
								Dairy products	Poul-try and eggs	Meat ani-mals	All live-stock
1910-14 average.....	58	50	100	100	100	100	100	100	100	100	100
1915-19 average.....	72	90	152	158	149	147	148	147	153	162	157
1920-24 average.....	75	122	221	160	159	181	168	159	163	121	140
1925-29 average.....	98	129	232	143	151	184	161	161	155	145	152
1930-34 average.....	74	78	179	107	117	121	124	105	94	83	91
1935-39 average.....	100	100	199	118	124	121	125	119	108	117	115
1940-44 average.....	192	237	315	139	148	211	152	169	145	166	162
1945 average.....	203	292	389	154	179	359	189	230	194	207	210
1946 average.....	170	277	382	177	197	387	207	267	197	248	241
1947 average.....	187	330	436	222	230	419	239	272	219	329	287
1948 average.....	192	356	472	241	250	442	259	300	235	361	314
1949 average.....	176	328	478	226	240	430	250	251	219	311	272
1950 average.....	200	369	516	236	246	425	255	247	181	340	278
1950 December.....	218	416	556	256	257	-----	265	272	249	360	311
1951 January.....	221	416	556	263	262	450	272	286	203	391	323
February.....	221	419	556	268	267	-----	276	285	205	425	340
March.....	222	427	563	269	272	-----	280	280	217	428	343
April.....	223	427	565	268	273	479	283	273	215	428	340
May.....	222	424	562	267	272	-----	283	270	221	418	335
June.....	221	429	567	265	272	-----	282	269	217	422	335
July.....	212	420	560	262	271	475	282	272	222	414	332
August.....	217	426	561	260	271	-----	282	277	211	416	336
September.....	219	430	570	259	271	-----	282	283	247	411	337
October.....	218	425	568	260	272	476	283	294	247	410	340
November.....	218	-----	-----	260	274	-----	284	305	249	387	332
December.....	218	-----	-----	260	273	-----	284	314	243	379	328

Year and month	Index numbers of prices received by farmers (1910-14=100)								All crops and live-stock	Parity ratio ⁵
	Crops									
	Food grains	Feed grains and hay	To-bacco	Cotton	Oil-bearing crops	Fruit	Truck crops	All crops		
1910-14 average.....	100	100	100	100	100	100	-----	100	100	100
1915-19 average.....	193	161	183	175	201	126	-----	171	164	111
1920-24 average.....	147	125	189	197	155	157	7 152	162	150	89
1925-29 average.....	141	118	169	150	135	146	145	143	148	92
1930-34 average.....	70	76	117	77	78	98	104	84	88	71
1935-39 average.....	94	95	172	87	113	95	95	99	107	86
1940-44 average.....	123	119	241	138	170	150	164	145	154	101
1945 average.....	172	161	360	178	228	244	207	203	206	109
1946 average.....	201	196	376	237	260	250	182	227	234	113
1947 average.....	270	249	374	272	363	212	226	263	275	115
1948 average.....	250	250	380	270	351	174	214	252	285	110
1949 average.....	219	170	398	245	242	199	201	223	249	100
1950 average.....	224	187	402	280	276	200	185	232	256	100
1950 December.....	233	202	436	339	366	202	211	258	286	108
1951 January.....	240	214	442	347	374	192	324	275	300	110
February.....	254	222	440	351	379	204	333	283	313	113
March.....	245	221	437	359	386	202	265	276	311	111
April.....	247	222	438	363	385	209	225	275	309	109
May.....	244	223	438	357	380	194	239	271	305	108
June.....	240	217	438	353	358	200	189	263	301	107
July.....	236	213	438	329	317	175	204	252	294	104
August.....	234	215	430	291	294	207	181	244	292	104
September.....	233	216	423	283	288	201	161	239	291	103
October.....	239	219	445	304	296	188	171	247	296	105
November.....	249	224	424	345	307	172	249	267	301	106
December.....	253	233	440	339	309	177	331	280	305	107

¹ Federal Reserve Board: represents output of mining and manufacturing; monthly data adjusted for seasonal variation.

² Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on pay-rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised January 1950.

³ Bureau of Labor Statistics.

⁴ Farm wage rates simple averages of quarterly data, seasonally adjusted.

⁵ Revised.

⁶ Ratio of index of prices received to index of prices paid, interest, taxes, and wage rates. This parity ratio will not necessarily be identical to a weighted average percent of parity for all farm products, largely because parity prices for some products are on a transitional basis.

Outlook Highlights

(Continued from page 14)

lier than it has been. In '51 pork was the only meat in larger supply than in '50. Beef output, on the other hand, is improving. In the months ahead pork will contribute less and less of the gain in meat supplies. Beef, veal, and lamb will make up a larger share. By late 1952, pork supplies will be smaller than at the same time in 1951, and beef will be considerably more abundant.

Butter and Milk Prices Strong

Prices for butter advanced more than for other dairy products in the closing months of 1951. Storage stocks of butter in December were less than half that of a year earlier. Butter markets gained strength despite large supplies of margarine. Prices of other dairy products also advanced in late 1951. In late December, manufactured dairy products topped a year earlier, ranging from 9 to 19 percent for the various items.

Prices of fluid milk increased more than seasonably the past fall. Average price received by farmers in December was \$5.22 per hundred pounds, an increase of 15 percent over a year earlier.

Feed Prices

Corn prices during the fall were influenced by the strong demand for feed and smaller marketings than usual of good quality corn. Prices of all feed grains in December were above the 1951 support level. Feed prices this winter and spring are expected to continue somewhat higher than a year earlier.

Wheat Prices

The strength in wheat prices since

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300
(GPO)

UNITED STATES
DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
WASHINGTON 25, D. C.
OFFICIAL BUSINESS

harvest has resulted from large U. S. exports and unfavorable harvesting conditions in other exporting countries.

Winter wheat production in '52 is estimated at 918 million bushels, 42 percent above the '51 crop.

Cotton

The supply of cotton is only slightly greater than a year ago; and while domestic consumption is running lower, exports are expected to be higher. Total disappearance this year will probably be larger than last year.